

Mokelumne River Watershed Success Stories

San Joaquin County RCD

1. Murphy Creek Fish Passage Improvement Project

The Murphy Creek project was contracted in June 2001. Funding was provided by the CALFED Watershed Program and the National Fish and Wildlife Foundation.

Additional in-kind services were provided by the East Bay Municipal Utility District; CA Department of Water Resources; CA Department of Fish and Game; University of California, Davis; USDA NRCS Plant Materials Center; USDA NRCS Stockton Service Center. Final permits were received in June 2003 and work began immediately. The major goals of the project were:

- ✓ Restore rearing and/or spawning habitat for Chinook salmon.
- ✓ Restore and enhance native riparian vegetation for the benefit of neotropical migrant songbirds.
- ✓ Improve water quality and water flows in the creek.
- ✓ Promote sustainable agricultural practices in the subwatershed.

The major components of the project include removal of a livestock watering impoundment, fish passage improvements at a bridge that took a county road over the creek, install bioengineered bank stabilization to reduce erosion and sedimentation into the creek.

Among the challenges were that there were several landowners (nine) with land along the creek. All the landowners agreed to the project, thanks to the efforts of the Sparrowk family, who owned the land where a livestock watering dam was removed. Two other landowners further downstream also needed to cooperate with each other and project work crews so that erosion treatments could be installed and fish passage improved at the Buena Vista Road bridge.

Removal of the livestock dam was only one part of the achieving the restoration and enhancement of salmonid rearing/spawning habitat. Two sections of streambank downstream of the dam had to be recontoured to reduce sedimentation and improve stream flows. The western stream bank angle was decreased from nearly 90 degrees to about 65 degrees and was reinforced with tree stumps and large cobble. The stream channel itself was lined with spawning gravel. This work took place from the Buena Vista Road Bridge north approximately 50 yards. Another stretch of the creek channel, approximately 50 yards further upstream and covering a length of about 25 yards, was straightened to reduce erosion along the eastern stream bank. The net effect of both channel-straightening measures was to enhance stream flow, reduce erosion and sedimentation, and improve overall fish passage through that portion of the creek.



Dam removal and channel straightening work was completed in fall of 2003. Non-native invasive species removal and revegetation of the stream banks occurred during the 2004 planting season. Chinook salmon were seen returning to the creek in the fall of 2005.

2. Programmatic Safe Harbor Agreement for Valley Elderberry Longhorn Beetle
The San Joaquin County RCD secured funding from the CALFED Ecosystem Restoration program in 2003 to conduct a habitat restoration/enhancement project at two sites along the Lower Mokelumne River. The planting plan for the restoration included installation of California elderberry shrubs.

During the course of permitting, one of the state agencies (Reclamation Board) said they would not issue a permit for the project due to the inclusion of elderberry bushes in the planting plan, unless a safe harbor agreement was secured (because of federal endangered species act concerns). So began a nearly two year journey that began with exploring various safe harbor agreements and examining how and SHA might work for the project.

Elderberry bushes themselves are not on the endangered species list. But they are a host plant for the federally listed valley elderberry longhorn beetle. Safe harbor agreements establish a baseline number of endangered species and are intended to protect landowners who conduct conservation and habitat management practices if those practices either result in the reestablishment or expansion of an endangered species or include the reintroduction of endangered plants or animals.



Safe Harbor agreements provide signatories with incidental take provided the take occurs during the normal routine operation and maintenance of the land in exchange for habitat restoration, enhancement, or management. In cases where endangered plants or animals are reintroduced or added to the landscape, SHAs allow landowners to return to baseline numbers if circumstances dictate. In those cases, the USFWS requests notification so they might transplant the affected species.

Landowner Brad Lange, cooperator EBMUD, and the SJCRCD began reaching out to NGOs including Sustainable Conservation and Environmental Defense for help in securing safe harbor protection for landowners involved in the project. As work continued, the SHA was expanded to include protection for landowners in the entire watershed if they opted to voluntarily sign the agreement and voluntarily conduct habitat restoration and enhancement on their property including replanting of elderberry bushes.

During the course of working with USFWS to secure the agreement, several other NGOs were consulted and the effort garnered some national attention when even the US Secretary of the interior and a local congressman had differing opinions of the worthiness and effectiveness of safe harbor protections. At that point, the SJCRCD opted not to become the SHA umbrella agreement holder. But the landowner was still interested in seeking the agreement protection.

With the blessing of the SJCRCD Board, the California Association of RCDs stepped in to sign the overall agreement with USFWS, and individual landowners signed agreements with CARCD for safe harbor protections. The result was a safe harbor agreement for Valley elderberry long horn beetle in the Lower Mokelumne Watershed that was the first non-mitigation programmatic SHA in the state of California.

Moreover, it contributed to the landowner securing the first Leopold Award for Conservation ever given in the state of California. It also resulted in the landowner being invited to speak at the White House Conference on Cooperative Conservation in St. Louis, Missouri in August 2005.